Special Issue

Fault Detection Based on Deep Learning

Message from the Guest Editors

For this Special Issue, we seek contributions that cover a wide range of topics related to deep learning-based fault detection, including, but not limited to, the following: (1) Novel deep learning architectures for fault detection in specific domains (e.g., manufacturing, energy systems, automotive, aerospace, etc.); (2) Hybrid models that combine deep learning with traditional methods for enhanced performance and robustness; (3) Transfer learning and data augmentation techniques to improve model generalization with limited fault data; (4) Explainability and interpretability of deep learning models in fault detection, ensuring their integration into safety-critical applications.

Guest Editors

Prof. Dr. Maoyin Chen

Department of Automation, College of Information Science and Engineering, China University of Petroleum (Beijing), Beijing 102299, China

Dr. Zhu Wang

College of Artificial Intelligence, China University of Petroleum (Beijing), Beijing 102249, China

Deadline for manuscript submissions

31 August 2025



Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.1



mdpi.com/si/226653

Processes
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34

mdpi.com/journal/processes

processes@mdpi.com





Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.1



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Chemical) / CiteScore - Q2 (Chemical Engineering (miscellaneous))

